



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Masanori AMANO et al.

Group Art Unit: 1772

Serial Number: 10/765,899

Examiner: Catherine A. Simone

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Confirmation Number: 2604

For: LAYER FORMING RELIEF

Attorney Docket Number: 032111

Customer Number: 38834

REPLY BRIEF

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

November 14, 2006

Sir:

In response to the Examiner's Answer mailed on October 5, 2006, the following is the Appellants' Reply Brief.

APPELLANTS' ARGUMENT

In the Examiner's Answer, the Examiner asserts that the meshes 119 of Hasegawa and the micro-projections 3 of Amano are analogous, because they both retain printing fluid. Accordingly, the Examiner argues that it would have been obvious to modify the meshes 119 of Hasegawa to have a trapezoidal or rectangular cross-section, similar to the micro-projections of Amano.

As pointed out by the Examiner, the meshes 119 of Hasegawa and the minute projections 3 of Amano are analogous in that they both retain fluid. However, Appellants respectfully argue that the fact that both of these elements are formed to retain fluid does not obviate the modification of the meshes 119 of Hasegawa to the shape of the minute projections 3 of Amano, for at least the reasons discussed below.

The meshes 119 of Hasegawa extend the whole length of the projections 111 and have a continued triangular cross-section as shown in Figures 7A and 7B. Further, the pitch P3 of the meshes 119, which is the space between the apexes of the adjoining triangular cross-sections, and the same-color pitch P1 of the color filters are set to be equal. Please see paragraph [0055], and Figures 3B and 7B. With this structure, the adjoining recessed portions of the meshes 119 retain the same color liquid. Accordingly, the color filters of the same color are formed in stripes having the above-mentioned pitch, P1=P3. See paragraph [0035].

In order to produce the electro-optical device of Hasegawa, the following process is used. First, color filters of a first color (green, for example) are formed with a pitch P1, such that the same color filters of a strip shape are disposed in parallel with each other at a predetermined

interval. Next, the letterpress 110 is displaced by 1/3 of pitch P1, and color filters of a second

color (blue, for example) are formed with a pitch P1, such that the second same color filters of a

strip shape are disposed between the first color filters. Finally, the letterpress 110 is further

displaced by 1/3 of pitch P1, and color filters of a third color (red, for example) are formed with

pitch P1, such that the third same color filters of a strip shape are disposed between the second

color filters and the first color filters.

If the meshes 119 of Hasegawa were instead formed in the same of the minute projections

3 of Amano, a color filter would be formed as a uniform plane corresponding to the whole area

of the meshes 119, similarly to Amano. With this structure, the color filters would not be formed

in stripes, since the color filters would be formed also in the space between the stripes of

Hasegawa. Accordingly, color filters of the two colors other than the first same-color filters

could not be formed between the first same-color filters in later steps, as discussed above. Thus,

a combination of Hasegawa and Amano would make it such that an electro-optical device of

Hasegawa cannot be produced. According to MPEP §2143.01, which quotes In re Gordon, "[i]f

proposed modification would render the prior art invention being modified unsatisfactory for its

intended purpose, then there is no suggestion or motivation to make the proposed modification."

Therefore, Appellants respectfully submit that it would not have been obvious to modify

the meshes 119 of Hasegawa to be the shape of the minute projections 3 of Amano simply

because the both elements are formed to retain fluid.

Furthermore, according to the present invention, the pitch P for providing the printing

convex portions 1 is equal to the same-color pitch P3 (pitch for providing the organic luminous

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layers 22 of the same color). See Figure 6 and page 6, lines 12-15 of the specification. On the

other hand, the pitch for providing the micro-projections 2 is not equal to P3. This feature clearly

shows the distinction between the present invention and Hasegawa. This feature is not included

in Amano. Therefore, even if Hasegawa and Amano were combined, one of ordinary skill in the

art could not achieve the layer forming relief of the present invention, which has printing convex

portions 1 provided at a pitch equivalent to the same-color pitch P3, each of the printing convex

portions having a top surface on which micro-projections 2 or projected microstrips 12 are

distributed.

Thus, for at least the above reasons, Appellant requests that the Honorable Board reverse

the Examiner's rejection.

If this paper is not timely filed, Applicants respectfully petition for an appropriate

extension of time. The fees for such an extension or any other fees that may be due with respect

to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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